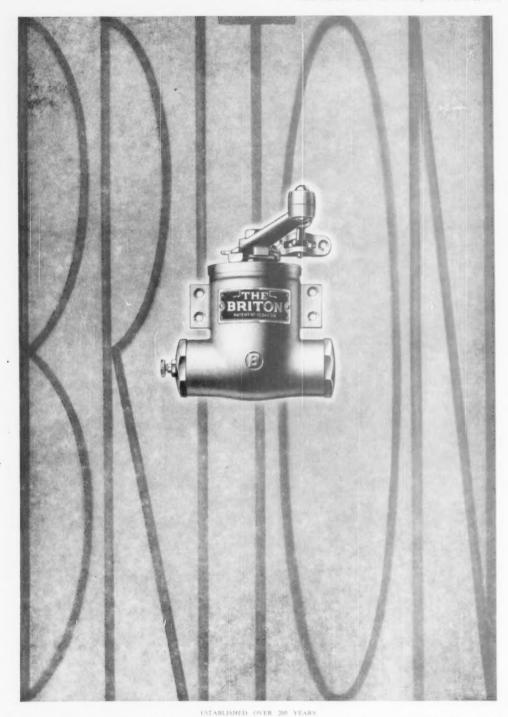
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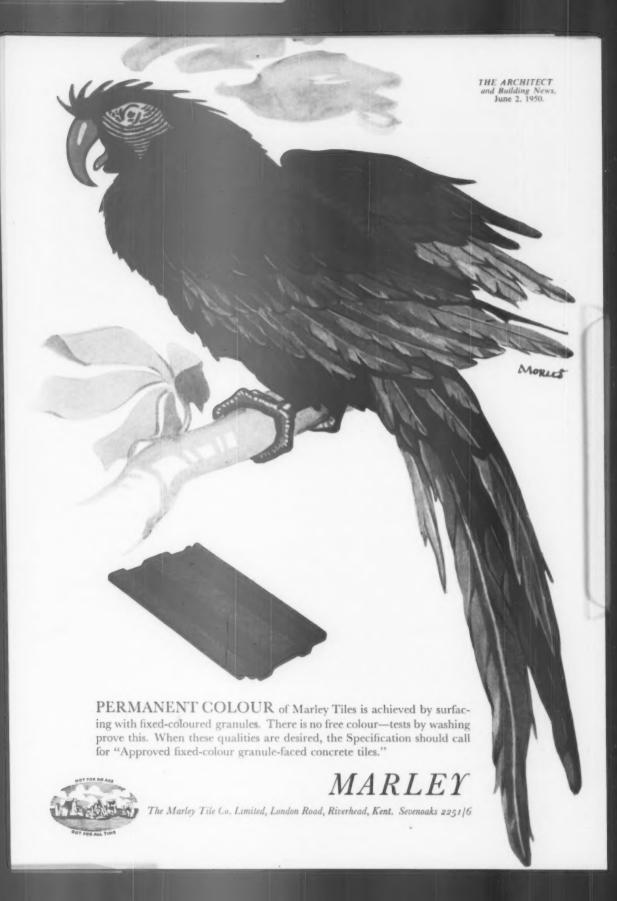
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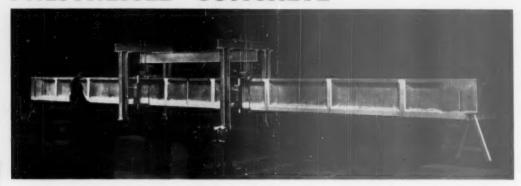
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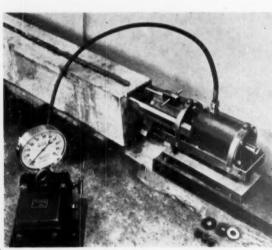


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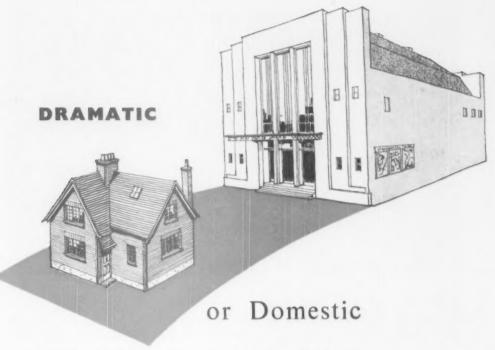
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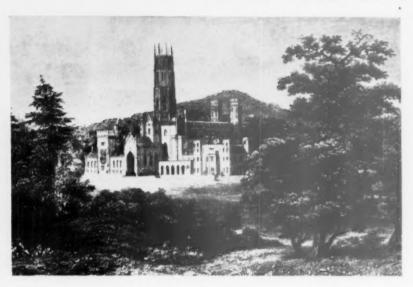
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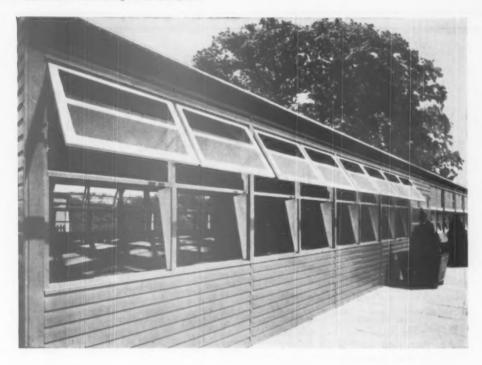
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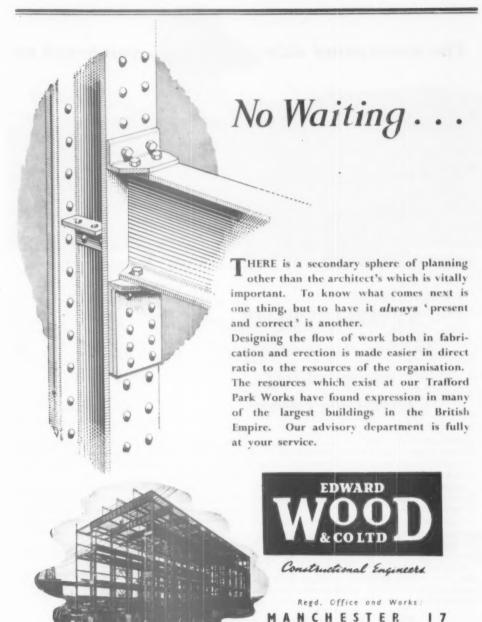
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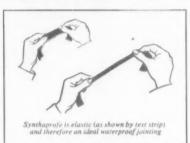


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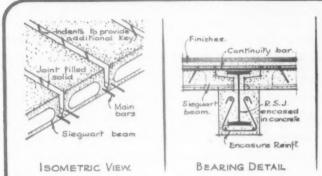
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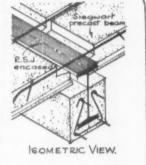
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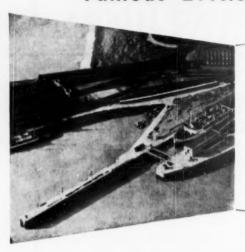
- After many years' wear a floor may become badly worn in parts, due to heavy trucking or dropping heavy objects.
- 2 The part affected should be marked out in chalk as a square or rectangle.
- 3 The concrete may be broken out, using hand tools or pneumatic picks, but the edge must always be carefully trimmed vertical by hand.
- 4 The formation is carefully rammed and a layer of waterproof paper is laid to prevent loss of water from the concrete into the formation which is often very dry.
- **5** Care must be taken to leave some reinforcement projecting from the surrounding floor and a layer of high tensile steel wire fabric is then placed and supported one inch from the bottom of the slab to lap up with it.
- **6** The concrete is made in the proportions of 1 cwt, cement to  $2\frac{1}{2}$  cu. ft. of fine aggregate and 5 cu. ft. of coarse aggregate and no more water than required to make a plastic workable concrete.
- 7 Immediately before concreting, the edges of the hole are well swilled with water and coated with 1.2 cement mortar.
- 8 The concrete is well worked into the cement mortar, thoroughly consolidated and screeded off level.
- 9 After the concrete has set, it should be covered with damp sand for seven days.
- 10 When the floor must be put into service immediately high-alumina cement is used, and after setting the concrete must be kept moist for twenty-four hours.



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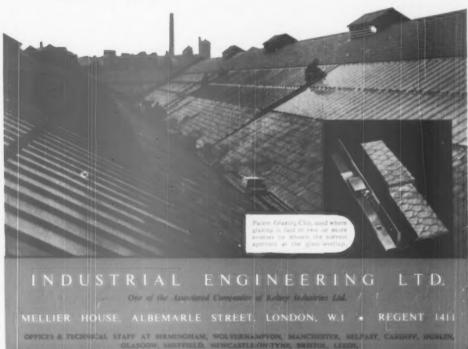
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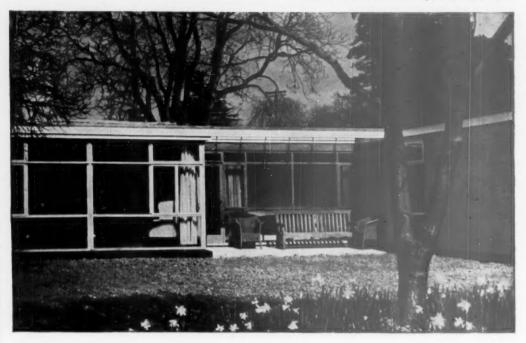


Photo: Architectural Review

Houses near Chichester. Architects: Messrs. Powell and Moya

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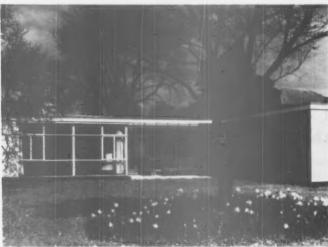
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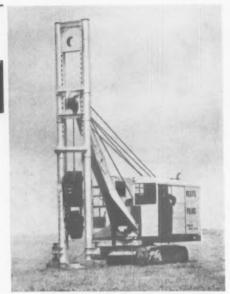
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#### THE IDENTITY OF TOWNS

MOST towns have something about their appearance which is a recognisable characteristic, even to those who visit for the first time. When a town has no such unique quality it is probably never visited by those who want to see and carry away a memory and only those whose business hurries them away will sense the loss.

The sort of characteristics we mean are not always clearly definable; they are not the dominant note given to many cities by a great cathedral or a gaunt castle. The lesser features which lead to visual recognition in our towns are often merely the outcome of situation, of accidental groupings, of the shape of a geographical background or of internal contours. How much less interesting the Eternal City would be with two or three hills instead of the immortal seven. The very shape of a town can be, to some, the most easily recognised feature; the "longness" of High Wycombe, the "roundness" of Rye.

Most of these identities lie fast bedded down in the past. Although there may be strong local feeling about them, it is often by no means articulate. It is, instead, often the visitor who sees the notable points, is vociferous about them or, who being a writer or an artist, is capable of communicating them to his fellow-men. There is no doubt that the recent war has given great opportunities for replanning and the correcting of many ills through the clearances brought about by enemy action. There are also vast possibilities of improvement embedded in the cold clauses of the Town and Country Planning Act, ways and means of getting towns to look better, to be more convenient and to prove their identity in the future.

Unfortunately, however, there are dangers in these new freedoms for reorganisation and reconstruction—dangers which threaten the identities of towns; which, if they are lost will pass away in a manner that will be unknown by posterity. The future can never

know the subtle and worth-while characteristics to which we refer, at second-hand. It is not enough to make regulations about buildings of historic interest and architectural merit. How is it possible to guard the silhouette of a town? How to ensure that that curious composition of roofs and turrets or this particular closed vista or open prospect can be preserved and, with such things, the very identity of a town—in spite of modern planners and modern developers?

Public and local bodies, even if not always disinterested, are commonly quite unenlightened and so the evil, insidious in its attack, makes its way without check, to the loss of the town and ultimately, of course, to national culture. Is not that which has happened to much of Oxford sufficient lesson? When once the facial features are lost, they cannot be recovered; it is no use being repentant about it and moving such things as Temple Bar about the country as a penance for the sins of the fathers.

To ask that all these sort of factors be taken into account by our town planners—especially those who have to deal with the more creative sides of their art as opposed to the mere administrative—is, according to some, an overload. The very last straw of a bale of factors which breaks the planners' pencil. But we would impose it and ask that the visual identities of our towns and villages be preserved at all costs and against the carpings of councillors, the groans of big business or the shoulder-shruggings of scientific statisticians. We think such things are worth worrying about.

We are not making a plea for the preservation of everything "old" at any cost; we are not asking that planning shall be unduly affected in its course by the sentimental biases of the antiquary. We are attempting to show that where a town or village can claim "personality," this should be recognised and preserved for the future. Retained so that the place may always be identified by the observant and not lost in the limbos either of trading estates, of transportation, or of garden city lay-outs.

The greatest danger may not lie with the planners of streets or suburbs or in non-recognition of visual identities from the past. We can contemplate, with much misgiving, the introduction of a large gas-holder into the sky-line of a town or-as in the case of Ipswich—the re-shaping of a town of considerable pre-existant character of a new power station. These things can be the dominant masses in a smaller town; again, in Ipswich, the new electricity station is the biggest building of the whole neighbourhood and its prominent position is emphasised by three huge stacks and two outsize cross-river pylons. These objects are inserted into the townscape by virtue of national need, if not always through real national planning; they are, however, not related to local things nor, indeed, do they come within the Town Planning Act development plans. They are "high-level" insertions-a grand example of the ill-relations which still exist in the realms of planning. But, above all, they are the examples par excellence, for posterity to point to, of insensitivity and a poor appreciation of the fitness of things which-blame the old Industrial Revolution, if you will-characterise these mid-twentieth century years.

#### EVENTS AND COMMENTS

HOUSE FLAGS

DERHAPS, like me, you did not know that under the London Building Act a house flag is a sky-sign, and therefore subject to control. The Marylebone Council have drawn attention to this strange state of affairs by requesting three firms to strike their colours. As far as I know, the requests were unsupported by the threat of broadsides or boarding parties, but had they been the position could scarcely have been more absurd. is a flag a sky-sign and are all sky-signs advertisements? What about the L.C.C.? And the R.I.B.A.?

I understand that a conference is to be held to decide upon a ruling. Surely Marylebone Council could have done that before making their requests, and thus avoided irritating people and wasting their time. There are far too few flags in this country, anyway, and even a badly designed one flutters prettily in the breeze.

If the Marylebone Council wants to chase some-

thing, let it organise legislation to fine the owners of clocks on view to the public which show the time incorrectly or not at all. Owners of such clocks have a responsibility to the public which some of them do not seem to appreciate.

RULE 73

THE popular edition of the Government's Economic Survey for 1950, published by H.M.S.O., has a photograph on its cover of a man apparently being swung through the air on a steel girder. This is a clear contravention of No. 73 of the statutory safety regulations, as the General Secretary of the Constructional Engineering Union was quick to point out. Government Departments should really be rather more careful with their illustrations, be they of babies or steelfighters. This particular picture looks to me as if it was specially posed, otherwise the man would not be holding on.

A SEAT OF "AESTHETIC QUALITY"

THE Commons, Open Spaces and Footpaths Preservation Society and the National Playing Fields Association are appealing for funds for a memorial to their late Secretary, Sir Lawrence Chubb, who held the former appointment for 52 years and the latter for 20 years. The memorial is to take the form of a "shelter-seat" on the edge of Kenwood, in the acquisition of which as a public open space Sir Lawrence played an important part. This is to be no ordinary seat, I quote from the appeal, "Not the kind of seat that one associates with esplanades and bus-stops, but a durable structure of aesthetic quality (hurrah!) designed by a distinguished architect, Professor A. E. Richardson, R.A., The cost of the memorial is F.S.A., F.R.I.B.A. estimated at £1,000." Indeed, no ordinary seat.

THE COST OF HOUSEBUILDING

FROM a "shelter-seat" at £1,000, it is no great step to £1,321, which is the final cost of the average local authority house completed in October, 1949. Second Report by the Girdwood Committee on the cost of housing was generally discussed in the leading article last week and was pretty severely criticised for lack of constructive ideas. As a matter of fact, there are no less than sixty-five constructive suggestions in Appendix IV to the Report, headed "Possible Economies in the



"I nearly completed that school ... Then came the capital cuts

Cost of House-building." Some of these are quite remarkable, for example, "No. 15. Ornamental brickwork should be omitted," and "No. 45. Expensive sanitary fittings should be avoided." Of the remaining sixty-three I guess that the majority, always excepting the 7 ft. 6 ins. ceiling height, which has yet to be officially approved, have already been adopted by most architects.

#### HISTORIC ARCHITECTURE

A CCORDING to the Daily Telegraph a house in Essex built in 1947 from salvaged material has been listed by the Ministry of Town and Country Planning as a place of historical and architectural interest. The owner is frank about the place and calls it an "architectural stew." The affair is basically a shame but has a Georgian wing, a Tudor wing and an Italian porch, leaded lights, uneven brickwork and Tudor doors, with "eleverly stained" asbestos panels.

It sounds perfectly sweet, and I am delighted that the Ministry is listing architectural stews. So useful for

the Festival of Britain.

#### BUILDING PRODUCTIVITY

THE Minister of Works has started talks on the recommendations of the productivity team's report on their U.S. visit with the National Consultative Council of the Building Trades. This Council consists of a representative from each of the following: N.F.B.T.E., Scottish National Building Trades Federation (Employers), Federation of Civil Engineering Contractors, Federation of Registered House-builders, N.F.B.T.O., Civil Engineering Construction Conciliation Board (operative side), R.I.B.A., Institution of Civil Engineers, and the R.I.C.S.

While this work is going on behind the scenes, the stage is set for the first big public meeting on the same subject, at the Kingsway Hall on Friday, June 9, at 7 p.m. I cannot think of a less suitable time or day of the week for such a meeting, particularly as it comes in the middle of the R.I.B.A. Conference at Bristol. Since better co-ordination in the industry is one of the planks of the report, these arrangements will no doubt serve as an admirable illustration of the status quo.

#### KNOW YOUR TELEVISION

EVEN if you dislike television, with all its frightening implications and bogus night club sets, you should, as an architect, know a little about its installation and space requirements, and as a parent with pretensions to being young, up-to-date and omniscient, you should

learn a little about its principles. This can quite easily be done by reading a small paper-covered book called *Television in the Home*, published by Iliffe's, price two shillings. Some of the illustrations are quite good, others, particularly where buildings appear, are quite bad. The text is readable and informative.

#### THE ABOLITION OF VILLAGES

QUESTIONS have recently been asked in Parliament about the rights of inhabitants of villages which are condemned to be abolished by the planning authorities. Mr. Dalton replied that if planning schemes submitted to him contained proposals for the removal of villages, no decision would be taken without full consultation with those affected, including the residents, who would be entitled to state their case at a public inquiry.

This reply raises a difficulty at Bekonscot, the well-known model village in Beaconsfield, which has, as far as I know, no inhabitants but plenty of visitors. The local Planning Authorities are apparently discussing the removal of this exhibition to a place where the "litter, noise and disorder" caused by visitors will annoy the

peaceable local inhabitants less.

#### SIX PLACES IN SEARCH OF AN ARTIST.

THE Hampstead Artists' Council is, with the help of the Hampstead Borough Council, organising an exhibition of models of schemes for the brightening up of six places in the borough, the tube station, a school, a hospital, a waiting room, and the food office. Among the artists taking part are John Hutton, Hans Feibusch, Mary Adshead, John Minton, and Barbara Jones.

If I remember aright some such thing was organised last year in conjunction with architect members of the Council. It seems to me that the reverse of the title

would be more truthful.

#### 1951 IN LIVERPOOL

REPRODUCE the prizewinning design for the Liverpool Festival of Britain symbol. I am sorry to say that I do not know who did it. The circles are alternately blue and red and the encircled figures red and blue. The straight lines are red and the wavy ones blue. A simple affair but rather too reminiscent of the sort

of crown they pop on the heads of unsuspecting beauties at seaside bathing beauty competitions,

ABNER

#### NEWS

#### Reports of Building

#### Working Party and Productivity Team

The National Consultative Council of the Building and Civil Engineering Industries, with the participation of representatives of the Federation of Associations of Specialists and Sub-Contractors, met on May 25 under the Chairmanship of the Minister of Works to resume consideration of the Reports of the Building Working Party and of the Productivity Team.

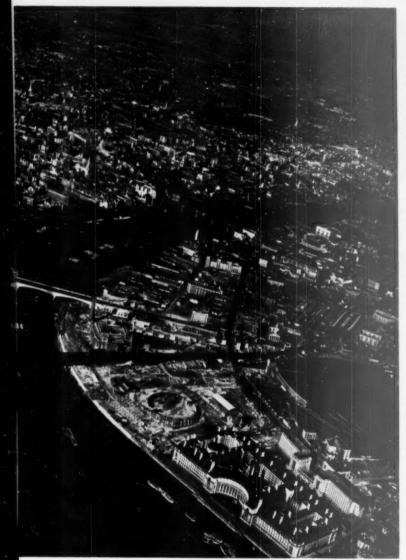
#### F T H E

The Council took note of a number of Government measures giving effect to recommendations in the Reports ininvolving Government action, in particular of the modifications of the planning controls resulting from the New General Development Order, the removal of structural steel from the allocation control, and the concentration of responsibility for building research in the Building Research Station.

The Council proceeded to discuss the best means of giving effect to the recommendations in the Reports which are primarily the concern of the Industry and professions, and this discussion will be continued at a further meeting.

#### R.I.B.A. Get-together

The President of the Royal Institute of British Architects and the President of the London Master Builders Association have extended an invitation to all the members of the three Associations forming the London Regional Council of Builders Foremen and Clerks of Works to be present at an informal reception to mark the inauguration of the Council, to be held at the R.I.B.A., 66 Portland Place, W.I. on Monday,



A recent aerial photo which shows the Festival of Britain Site, work in progress on the Bailey bridge alongside Hungerford Bridge; The Royal Festival Hall; the new Thames Embankment, and in the distance opposite St. Paul's can be seen the new Bankside power station taking shape.

June 12, at 6 p.m., to be followed at 6.15 p.m. by an address by Sir Thomas Bennett, C.B.E., F.R.I.B.A., upon "General Foremen and Clerks of Works—The Importance to the Building Industry of their dual function."

### Northern Ireland and the Festival of Britain

The Government of Northern Ireland announce the appointment by the Ministry of Commerce of Mr. W. M. de Majo, M.B.E., M.S.I.A., of 33 Jubilee Place, London, S.W.3, as Coordinating Designer for the Exhibition of Ulster Industry and Agriculture to be held in Belfast as part of the Festival of Britain 1951. Mr. de Majo will be in charge of the complete design programme for both the industrial and agricultural divisions of the exhibition.

Mr. H. Lynch Robinson, Dip.Arch., A.R.I.B.A., Adviser on Design to the Festival Committee for Northern Ireland, will be the Section Designer for the exterior portions of the exhibition.

Under the provisional title of "Farm and Factory" the exhibition will be an outstanding feature of the 1951 Festival programme. It will be held from June to August next year at one of the new Government factories now under construction at Castlereagh, Belfast, and will cover an area of over 40,000 square feet, including the open-air agricultural exhibit.

After the exhibition the site and building will be used for industrial purposes under the development programme of the Government of Northern Ireland

#### Materials Handling

#### in Industry

A discussion of the report of a Specialist Team which visited the U.S.A., under the auspices of the Anglo-American Council on Productivity, in September, October and November 1949, to study Mechanical Aids and Handling Devices in the factory and the use of power-operated hand tools will take place at 3 p.m. on June 12 at a Mechanical Handling Convention to be held at Olympia concurrently with the Exhibition. Tickets for the above on application to: "Mechanical Handling" Dorset House, Stamford Street, London, S.E.1. Telephone: Waterloo 3333. The Report will also be on sale at the Mechanical Handling Exhibition, Olympia, price 2/6.

#### Central Land Board: Assignments of Claims

The Central Land Board are required to accept notice of assignment of the right to receive a payment (or part of a payment) on a claim made under Part VI of the Town and Country Planning Act, 1947 (Section 64 (2) of the Act and Regulation 7 of the Claims for Depreciation of Land Values Regulations, S.I. 1948 No. 902). They cannot, however, where the assignment relates to part of a payment, settle questions of apportionment between parties to an assignment. Such questions should be settled by the parties themselves, since the Board's duty is limited to a valuation of the interest owned by the claiment on the Appointed Day in the whole of the land in respect of which he has made a claim.

For example, three acres of land, the subject of the claim, might be sold as three one-acre plots with an assignment to each purchaser of the right to that part of the payment attributable to his plot. The development value will not necessarily be evenly distributed between each of the three plots, and the Board cannot undertake to calculate the proportion.

The assignment of part of a payment may relate to a specified fraction of the payment, or to a specified amount out of the payment, or it may relate to an area forming part of the whole area included in the claim. Whatever form the assignment takes, the parties will have to agree between themselves and advise the Board how the payment to be made in respect of the claim is to be divided between them.

# Discussion on the Town and Country Planning Act at the R.I.B.A.

At the general meeting fixed for Tuesday, June 20, following the announcement of the Council election results, there will be a discussion on the working of the Town and Country Planning Act, 1947. This discussion is to enable architects to give their experience of the working of the Act to date.

The Act will be considered under three broad headings and a speaker will be chosen to initiate each section. The President will be in the Chair, and Professor W. G. Holford, F.R.I.B.A., has undertaken to direct the discussion. The three headings are: The develop-

The three headings are: The development charges; the operation of the Act as it affects the architect; the operation of the Act as it affects the planning authority. The evening has been organized to enable members to take part in the discussion, and as much time as possible will be allowed for this.

#### Lake District National Park Boundary

Sir Partick Duff, Chairman, Lord Lawson, Vice-Chairman, and members of the National Parks Commission are visiting the Lake District from June 3 to June 8, in order to study the possible boundary for the proposed Lake District National Park.

#### Zine up £4

The Ministry of Supply announces that as from May 30, the price of good ordinary brand zinc will be increased by £4 from £107 10s. to £111 10s. per ton delivered. Prices of other grades are varied accordingly.

The John S. Owens prize of £15 0s. 0d. has been awarded to Mr. G. D. Tooby, of Stourbridge, Worcestershire, for his essay on "The ventilation of dwellings and its effect on human health,"

#### PARTNERSHIP DISSOLVED

The Firm of W. H. Ansell, P/P.R.I.B.A., and Arthur Bailey, O.B.E., F.R.I.B.A., of 5 Verulam Buildings, Gray's Inn, W.C.I, has been dissolved by mutual consent as from April 30, 1950. The practice will be continued by Mr. Bailey under the style of Ansell & Bailey. Mr. Ansell will continue to be associated with the practice as consultant.

#### CHANGE OF ADDRESS

On June 1, headquarters of the Department of Scientific and Industrial Research left Dorland House and Rex House, Regent Street, London, S.W.1, and moved into Charles House, 5-11 Regent Street, London, S.W.1. The telephone number will remain Whitehall 9788.



Mr. Whitfield Lewis' team in the recently created Housing division of the L.C.C. Architect's department. L to R: Michael Powell, A.A. Dipl., A.R.I.B.A., Colin Lucas, F.R.I.B.A., Mrs. R. Stjernstedt, A.R.I.B.A., A.M.T.P.I. and H. G. Gillett, A.R.I.B.A.



Progress photo of the Credit Foncier Bank building in Dakar. The Architect is M. Pierre Fournier.

#### OBITUARY

The death occurred on May 30, of Clement Stretton, F.R.I.B.A., of Leicester.

#### COMING EVENTS

Royal Institution of Chartered

- Surveyors

  June 5, at 5 p.m. Annual General Meeting.
- T.D.A.
   June 5-9 incl. At the Forest Products Research Laboratory, Princes Risborough. Post Graduate Course for Timber Technology Instructors.

Housing Centre

 June 9-11. At The Dome, Brighton. Annual Conference. "Housing: The Next Fifty Years."

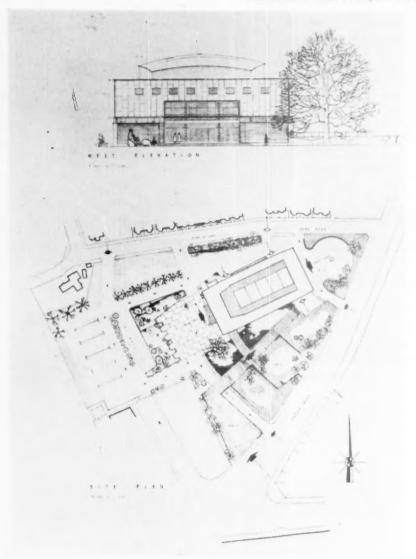
#### EXHIBITIONS

"Danish Architecture of To-day" at Lewis's Polytechnic, Glasgow, From May 31 to June 17.

Mechanical Handling Exhibition and Convention at Olympia, London. From June 6 to 17.

Bakelite, Warerite and Vybak Plastics Exhibition in Assembly Room of the Bleachers Association Ltd., Blackfriars House, Parsonage, Manchester 3. From June 7 to 13, 10 a.m. to 6 p.m. every day with the exception of June 10 and 11.

Antique Dealers' Fair at Grosvenor House, London, W.1. From June 8 to 23.



Guildford Civic Hall Competition: Winning design

#### IN PARLIAMENT

#### **Development Corporations**

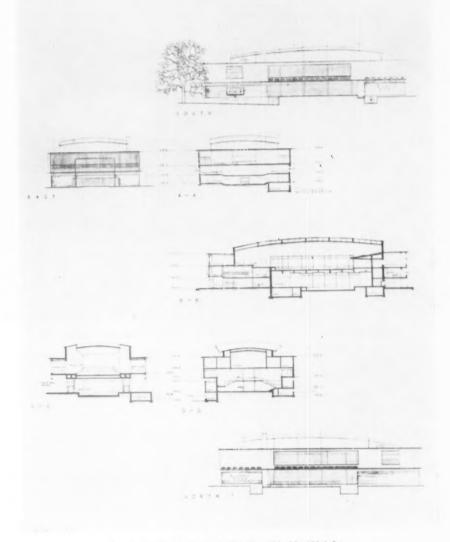
The Minister of Town and Country Planning was asked by Earl Winterton on May 23 how far the new town development corporations were subject to regulations laid down by the Department in respect of the lay-out and appearance of the houses they erected. Mr. Dalton stated that his policy was to do all he could to stimulate build-

ing, both of houses and factories, by all the development corporations. If they felt themselves to be obstructed he hoped they would let him know. Earl Winterton asked if that meant that the Crawley and other corporations were not subject to control by a local authority, and could carry out what plans they liked. To this Mr. Dalton replied that all that happened was that their proposals were merely sent for observation to the local authorities charged with planning functions. So far as he could find the Department had never turned

down any of their proposals on the ground of lay-out and appearance.

#### Harlow Chairmanship

Mr. Nigel Davies asked the Minister of Town and Country Planning whether the four individuals who had recently ceased to be members of the Harlow New Town Development Corporation were dismissed, or whether they resigned voluntarily. Mr. Dalton replied that the members of the corporation were appointed for three years, which ex-



by L. F. Richards and Charles W. H. Wright

pired on May 16. One of the four members referred to resigned, and the other three were not re-appointed. Under Sir Ernest Gower's chairmanship of the Corporation, the New Town had made an admirable and promising start. The fact that he had now appointed a younger man with wide practical experience of building and civil engineering to succeed Sir Ernest Gowers and to guide the New Town through its next phase, was, as he had told Sir Ernest, no reflection on his most able completion of the first phase, (May 23).

#### Unemployed Builders

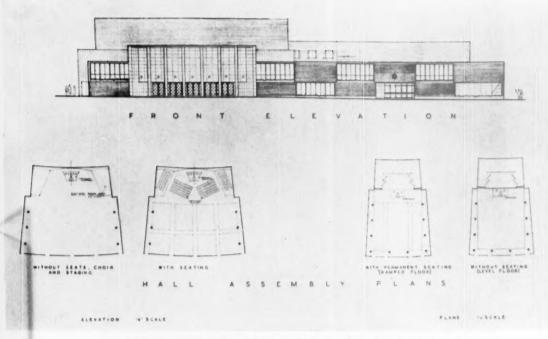
Mr. Stokes, in a reply to Mr. Watkinson (May 24) gave the following figures of the number of insured males, whose last employment was in the building and civil engineering industry, registered as unemployed in Great Britain, at the dates specified:

April 11, 1949 37,642 June 13, 1949 31,550 December 5, 1949 36,565 April 17, 1950 36,565

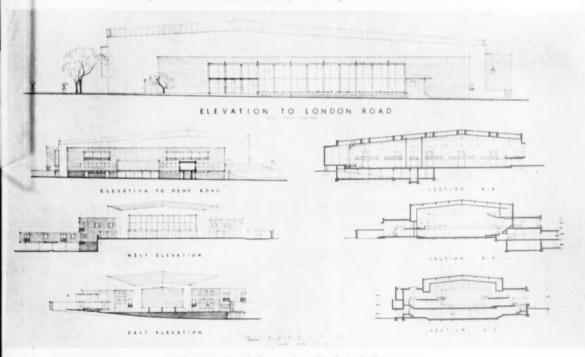
(From Our Parliamentary Correspondent)

### The Historic Architecture of Bristol: Errata

We have it on the authority of Mr. Walter Ison that the architect of Red-land Chapel was not John Strahan, but William Halfpenny. The date of Albermarle Row is 1763; that of Berkeley Square about 1790, and Duke Street, mainly 18th century with a few early 19th century additions. There was also a misprint in the text of "group house" instead of "group of houses." The author of the article is not responsible for any of these errors.



design awarded 2nd premium, by W. S. Bryant and G. A. H. Pearce



design awarded 3rd premium, by Eric G. Broughton

#### CORRESPONDENCE

#### Competitive Design for a Secondary School at Hunstanton

To the Editor of A. & B.N.

Sir,—Mr. Oswald P. Milne in his letter in your issue of May 19 seems worried at the thought of teachers and pupils going up and down the ten staircases in the winning design of this Competition (though it is not quite clear to us why, in a two-storey building without corridor access between teaching rooms, ten staircases should necessarily be any more tedious than one).

In our opinion the slight inconveni-ence of climbing one floor is more than ence of climbing one floor is more than offset by the absence of seemingly inter-minable corridors which are so often a distinctive feature in even the best designed schools. The winning scheme gives us at last a compactly designed school with well lit rooms and plenty of space left for playgrounds and playing fields.

The drawings illustrated were ob-

The drawings illustrated were obviously not intended for reproduction and it is difficult, therefore, to judge the building in detail. It appears, however, that this winning design will not only be "a contribution to the 1950 requirements of a school" but also stands a good chance of becoming a coherent and beautiful building.

We are, etc., POWELL AND MOYA.

#### C Sheet No. 13

In A. & B.N. of May 12, we published a letter from Mr. William Tocher Dip,Arch. (Abdn.), A.R.I.B.A., com-menting on C Sheet 13. We asked the editor of the construction details to draft a reply, which is now printed below.

To the Editor of A. & B.N.

Sir,-I should like to make the fol-

Sir,—I should like to make the following points in answer to the letter sent by Mr. Tocher.

1. The reason for using a d.p.c. of different material (felt) to that used for tanking, is that, on settlement of the building, great flexibility would be required in a d.p.c. in order to maintain a good joint with the vertical asphalte. felt is more flexible, it would be a

better material to use.

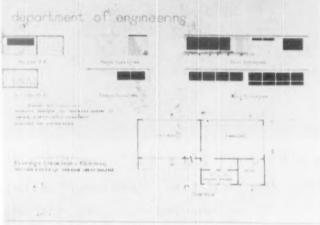
2. It is unwise to specify a two layer asphalte tanking, when laying firms do not guarantee work unless carried out in three layers. It is possible, however, to cut vertical work down to a thick-ness of 1".

3. The Building Research Station was consulted on the question of sequence of building operations, and in their opinion there would be no danger of the asphalte tanking cracking after applying it to the skin wall, before the

structural wall is constructed.

4. Figure 2 was not intended to be a basement with high hydrostatic pressure, therefore the question of the skin wall and asphalte tanking blowing off would not arise. If high pressure were present a pressure-resisting skin wall would need to be constructed. 5. For detail 3, if the site were water-logged as suggested, the area around the





See letter below from John Wood Messer

building would be drained for building operations and sheet piling inserted. This being the case, there would be no question of water pressure before the pressure-resisting wall was constructed,

It is useful to have other opinions on the sheets which are produced, and letters such as the one sent by Mr. Tocher are valuable as reference when further sheets are prepared.

I am, etc., Edward D. Mills, Editor, A. & B.N. Construction Sheets.

#### Letter from America

To the Editor of A. & B.N.

Sir,—I was very interested in your presentation of students' school designs from your April 21 issue, which I have just received. Perhaps some of your readers would be interested in what American students are doing along these lines. To that end I am sending you two of the drawings used in my own course. I am a junior at Milton College, Milton, Wisconsin,

I am, etc., JOHN WOOD MESSER.

#### Asbestos Cement Sheet Roof Coverings

The Council for Codes of Practice for The Council for Codes of Fractice for Buildings has now issued for comment draft code 143.201, "Asbestos-Cement Sheet Roof Coverings," prepared by a Committee convened by the Royal Institute of British Architects.

The code is in draft form and subject, before fired publication, to amendment.

before final publication, to amendment

petore final publication, to amendment in the light of comments, which should be submitted before June 14, 1950. Copies of the draft code may be obtained from the British Standards Institution, 24/28 Victoria Street, Lon-don, S.W.1, price 3/-, post free, proof reference CP(B) 936.

The new furniture shown by Scottish Furniture Manufacturers, Limited, on their stand at the British Industries Fair will be on display at Peter Jones Store Form Workshop Manufacture 12. Store from Wednesday, May 31, for several weeks.



# AGRICULTURAL WORKERS' HOUSES for the Newton Harcourt Estate, near Leicester

Architect: HENRY GODDARD, D.S.O., D.F.C., A.F.C., F.R.I.B.A.

THESE houses were designed for minimum first cost, with a view to their being let at a reasonable rent. The special needs of agricultural workers were considered in the design: in this connection, the advice of the local branch of the Women's Institute was sought. Economy in running expenses, from the tenants' point of view, and in maintenance, from the landlord's, were points which had to be borne in mind. The results have been achieved by the adoption of a very simple structure, with simple but durable finishings.

#### COST

The contract price for four houses is £4.820. This sum includes Septic Tank and subsoil irrigation for effluent disposal, £100: hot and cold water supply, cookers, sanitary fittings, £500: electrical installations, including mains connections, £150. Not included were fencing, paths, and other site works (carried out by estate workmen), £70: and water supply by electric pump, £60.

#### PLANNING

The accommodation consists of:

Main Rooms:

Living Room, 225 ft. super.
Utility Room, 95 ft. super.
Bedroom 1, 125 ft. super.
Bedroom 2, 115 ft. super.
Bedroom 3, 75 ft. super.

Main Walls, Ground Floor:
11 in. cavity brickwork. Rustic Fletton facing.

Gable End :

CONSTRUCTION

41 in. brickwork, corrugated asbestos cement cladding, with air space.

Ground Floor: Solid: 6 in, concrete on 12 in, hardcore First Floor:

Wood joist construction with small spans, enabling 4 in. x 2 in. joists to be used at 1 ft. 4 in. centres. 7s in. boards.

Offices :

Bathroom. W.C. Fuel Store. Bicycle and Tool Store. Larder. Drying Closet. Linen Cupboard. Preference was expressed by W.I. Members for the following points in particular:

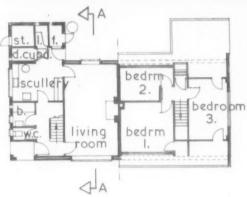
(a) A single large living room, equipped with combination grate: no parlour.

(b) "Utility" room with sink and electric wash boiler: separate wash house not thought desirable.

(c) Bathroom and indoor water closet downstairs, to facilitate "clean up" of worker on his return from farm, and make supervision of children easier whilst carrying on other tasks. Separate outside w.c. thought undesirable.

(d) Provision of proper drying closet, with heater and ventilation to outside air, to dry wet clothes and washing in wet weather, without filling the house with steam.





#### GROUND & FIRST FLOORS



Roof:

4 in. x 3 in. rafters at 6 ft. 0 in. centres. 7 in. x 3 in. purlins. 3 in. x 2 in. ceiling joists and 2 in. x 2 in. ashlaring. Roof covering: asbestos cement purlin tiles.

Windows:

Purpose-made wooden casements, designed for draught exclusion.

#### FINISHINGS



SECTION A-A



Ceilings throughout, covering of ashlaring and lining of cupboards, Celotex boarding. Brickwork in living with wood float to bring up sand. Ground Floor, red

Sealantone coloured water-proofed cement finish. Quarry tile skirtings. Walls and ceilings, distempered. Flush doors, except outer doors, in 3 in. x 2 in. frames. Facing brick surround to living room grate.

#### HEATING AND HOT COOKING. WATER

A Nu-Heather combination grate, having "improved" open fire, with provision for over-night burning, is fixed in the living room. This provides cooking facilities, heat to the living room by direct radiation, heat to the upper landing by Dimplex radiator, and hot water him to be a possible to the provider of the provi water by means of a Rolyat combined calorifier and feed tank. All pipework is in copper. The calorifier is fitted at the bottom of a linen cubpoard on the first floor. cold feed tank is fitted in the upper part of this cupboard, with Celotex horizontal partition below, to avoid "sweating." There is, in consequence, no risk of freezing. An electric washboiler, fitted in the "Utility" room, can also be used for heating water when the cooker is not lit. The system has proved satisfactory and economical in

use. It was originally intended that the radiator should be turned off when there was an appreciable demand for hot water, but this has not proved necessary in practice; the back boiler has sufficient power to deal with both satisfactorily.

General Contractors: Messrs. H. V. Batchelor & Co., Ltd., of Fleckney, Near Leicester.

Plumbing and Hot Water Supply: Messrs. Walter Allen & Son.

of Great Glen, Near Leicester. Electrical Work: Messrs. H.

Messrs. H. Reeve, of Leicester Road. Fleckney, Near Leicester.

Bricks: Messrs. The London Brick Company and Messrs. Fordus Ltd.

Combination Grate: Messrs. The Grahamston Iron Co. Ltd., of Falkirk

Calorifier: Messrs. The Rolyat Tank Co., Ltd., of York.
Squitary Fittings: Messrs. John Bolding & Sons, Ltd., of

Door and Window Furniture: Messrs. Adrian Stokes Ltd., of London.

Paint: LC.I. Ltd (Dulux). Radiators: Dimplex

#### A.B.T. Statement

THE A.B.T. has issued a statement on "Some Effects of the Building Cuts." The following are extracts:

The Association of Building Technicians have opposed the Government's policy of reducing and restricting capital investment, especially building for the social services and for industry, ever since it was first announced in the White Paper "Capital Invest-ment in 1948." We do so not only because of the great needs of the social services but because this policy, far from producing the steady expansion that our economy needs, draws it instead into a vicious circle of decline.

Since 1947 the country's economic difficulties have worsened, not improved, and further cuts have followed. Practically the entire programme of Health Centres was aoandoned. Housing in the much-publicised new towns is virtually at a standstill and the total provision of housing accommodation is certain to show a drop in 1950. The cost of schools is being steadily cut, in the main by lowering standards.

This policy has not even had the tended effect of "saving scarce intended effect of labour and materials for diversion to more urgent needs" (White Paper). Instead of a saving of 164,000 men in the building industry the labour force has slightly increased and labour, materials and capital have merely been diverted from essential building for industry and the social services to less essential work of repairs and conver-

This is the general picture. To supplement it we have studied the effect of the cuts on London County Council School building.

The London School Plan, which owing to changes in the birth rate almost certainly underestimated the needs, suggested the building of 103 Comprehensive High Schools. Up to the end of 1949 only six new schools (of which only one is permanent) had been completed.

The Council's programme for 1950 proposed the expenditure

£8,507,000, which was cut by the Minister of Education to £3,067,000.

Only one Comprehensive High School is proposed for 1950.

It has been estimated that if London school building continues at the rate proposed for 1950 it would take some 80 years to complete the whole programme proposed in the London School Plan.

For London children the cuts mean that completely obsolete schools must continue to be used, that proper provision for physical and technical education and for school meals must be indefinitely postponed, and that the raising of the school leaving age and a reduction in the size of classes cannot be effected.

Just as the cuts affect London school building, so they affect social building in all parts of the country. Building technicians must realise that more than their own welfare is at stake: what is at stake is the welfare of the whole country.

#### AMERICAN PRODUCTIVITY TEAM MEETINGS

Dase.	Place.	Location.	Time.	Speakers.	Film.
Friday, June 9th	London	Kingsway Hall	7.0 p.m.	R. O. Lloyd, R. H. Matthew F. W. Beazley	No.
Tuesday, June 13th	Cambridge	Lion Hotel	5.30 p.m.		Yes.
Do.	Newcastle	Lecture Theatre, Literary and Philo- sophical Society's Hall, Westgate Roa	7.0 p.m.	W. Horsfall, T. C. Hill J. H. McKechnie	Yes.
Thursday, June 22nd		Lecture Theatre, National Museum of Wales	7.0 p.m.	R. O. Lloyd, M. H. Thackray Glynn Lloyd, W. R. Cowen	Yes.
Monday, June 26th	Glasgow	Institute of Engin- cers and Shipbuilde Hall, 39 Elmbank C	15	From: R. O. Lloyd, M. T. Waterhouse W. R. Cowen, J. H. McKechnie R. S. Gray, C. G. Rowlands	Yes.
Tuesday, June 27th	Edinburgh	Pollock Memorial Hall, 18 Bristo Stre		From: R. O. Lloyd, M. T. Waterhouse W. R. Cowen, J. H. McKechnie R. S. Gray, C. G. Rowlands	Yes.
Do.	Sheffield	Memorial Hall	7.0 p.m.	C. D. Calverley, R. H. Matthew F. W. Beazley	No.
Wednesday, June 28th	Dundee	School of Econo- mics, Bell Street	7.30 p.m.	From: R. O. Lloyd, M. T. Waterhouse R. S. Gray, C. G. Rowlands	Yes.
Thursday, June 29th	Aberdeen	MacRobert Hall, Robert Gordons College	7.30 p.m.	From: R. O. Lloyd, M. T. Waterhouse J. H. McKechnie, R. S. Gray, C. G. Rowlands	Yes
Thursday, June 29th	Birmingham	Birmingham & Mid land Institute, 1/18 Paradise Street	- 7.0 p.m.	C. D. Calverley, T. C. Hill, N. S. Farrow, W. R. Johnstone	Yes
Friday, June 30th		Queens Hall, Berkeley Cafe, Clifton	7,30 p.m.	N. S. Farrow, R. H. Matthew Glynn Lloyd	?
Monday, Jule 3rd	Liverpool	Crane Hall	7.0 p.m.	R. O. Lloyd, M. T. Waterhouse W. J. Clarke, C. G. Rowlands	Yes
	Manchester	Houldsworth Hall, Deansgate	2.0 p.m.	R. O. Lloyd, R. H. Matthew W. J. Clarke	Yes



House No. I

#### TWO HOUSES IN CHICHESTER

Architects: POWELL & MOYA, AA.R.I.B.A.

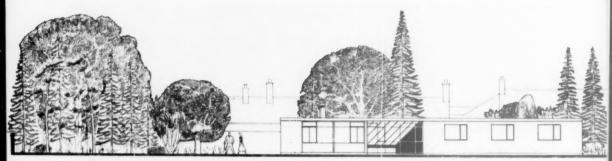
THE site which is entirely enclosed by an old garden wall, used to be an orchard and vegetable garden. It measures approximately one acre. Access is obtained through a right of way from Mount Lane which branches off from Westgate, one of the four main streets of the City.

The two clients are relatives and they decided to develop the site into a private estate for the two houses.

#### REQUIREMENTS

The requirements of the two clients, whilst being similar, differed in certain items, which affected the siting and planning of the two houses. House No. 1 is owned by a Canon of Chichester Cathedral, who required a smaller garden than the owner of House

No. 2. The site divides itself naturally into two different sized plots—the boundary being a line of fruit trees and a lonicera hedge—one of \( \frac{1}{2} \) of an acre (on the east of the site) and the other of \( \frac{1}{2} \) of an acre. The client of House No. 1 required the following basic accommodation: Living Room with Dining recess; a Kitchen large enough to be used by a resident servant; a small Study; separate bedrooms for the owner and his wife; a servant's bedroom and a spare bedroom. The client of House No. 2, who is a Naval Officer, married, with one child, required the following: Living Room; separate Dining Room; Working Kitchen, as no servant is employed; owner's bedroom (double); Dressing Room; spare bedroom and a nursery with direct access from the garden so the child could go straight to his room from the outside without bringing

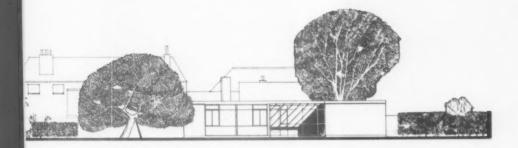


SOUTH ELEVATION

#### SITE PLAIN TREE REFERENCE

1 Mulberry. 2 Canadian Maple. 3 Holly. 4 Lime. 5 Laurestinus. 6 Syringa. 7 Maple. 8 White Rose. 9 Espalier Apple. 10 Herbaceous Border. 11 Hedge. 12 Crab Apple. 13 Lonicera. 14 Oak. 15 Quince. 16 Fir. 17 Pine. 18 Walnut. 19 Apple. 20 Pear. 21 Japanes Cherry. 22 Cypress. 23 Yew. 24 Lilac. 25 Arbor Vitae. 26 Ash. 27 Flower bed.





dirt into the rest of the house. The client of House No. 1, therefore, required rather more accommodation on a smaller site than for No. 2. No. 1 is provided with a solid fuel fire in the Living Room, with hot air ducts serving the dining recess and kitchen; No. 2 relies entirely on electric heating, though a small open fireplace is provided in the Living Room. Both clients possess antique furniture which they wished to be incorporated in the new houses to full advantage. Beyond these requirements the Architects were given an entirely free hand.

### PLANNING

Whilst the two houses are similarly planned in the Living, Hall and Terrace area, the Bedroom wing in House No. 1 is built at right angles to the living area for the following reasons: the narrowness of the site; so that the bedrooms could face east with a fine view of the Cathedral; so that the house could be built round a mulberry tree growing on the site. In House

No. 2, the Bedroom wing continues straight along from the living area so that the bedrooms face south and do not overlook either House No. 1 or their own living area. House No. 1 is approximately 1,400 sq. ft. and House No. 2 1,300 sq. ft. Single storey construction was chosen to give privacy to the houses within their walled garden; to avoid interfering with the views from the existing houses on Westgate over the Meadows, and to save space in planning by the omission of a staircase and landing. This approach to the problem was put to the County Planning Authority who raised no objections to the design. Both houses are built on the north of the site to get full benefit of the view over the garden and to obtain the maximum of sun.

### CONSTRUCTION

Ground Floor. 2 in. site concrete, covered with damp proof membrane. 4 in. No-Fines concrete laid over membrane (for thermal insulation). 1 in. cement screed finish.

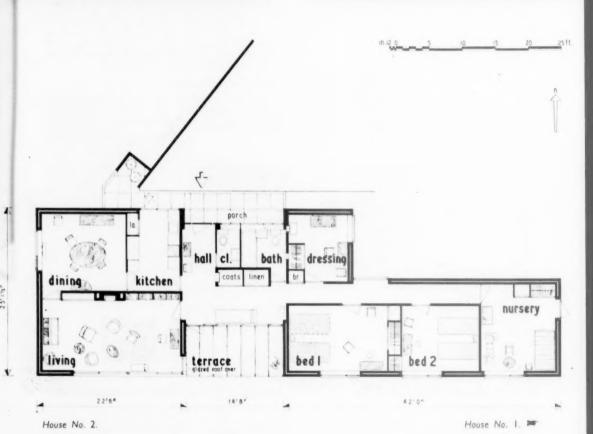
Continued on page 574



Lighting up time in House No. 2 shows off the Interior.





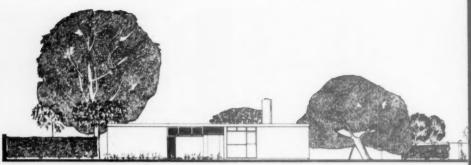


Architects: Powell & Moya, AA.R.I.B.A.









NORTH ELEVATION



The terrace-House No. 1.

Continued from page 571

External Walls. Outer leaf 4½ in.; keyed Flettons; 2 in. unventilated cavity; inner leaf 4 in. breeze. At the main living room window the roof is supported on two 2½ in. diam. mild steel tubes. Internal Walls. 4½ in. brick. Internal Partitions. 2½ in. breeze. Roof. 5 in. R.C. Slab, placed on 2 in. woodwool slabs as permanent shuttering. Slab reinforcement of B.R.C. fabric, with steel rod reinforcement over openings. Slab covered with a 2 in. Foamed Slag Screed laid without falls. Screed blinded over and covered with patent 3-ply built-up bituminous roofing felt with granite chipping finish. Windows. Standard E.J.M.A. opening lights in purpose made timber frames. Plumbing. All internal with service pipes encased. Overflow pipes grouped together and covered under an external hood of expanded metal and rendering. Finish and colour as

for external walls. Hot Water System. Electric; House No. 1—40 gall, lagged tank with immersion heater. House No. 2—60 gall, electric storage water heater.

### INTERNAL FINISHES

House No. 1. White gloss paint in kitchen, cloak-room and bathroom. Elsewhere all plaster-work white distemper. All wood work white gloss paint, except internal face of front door and surrounding flush panel in light grey gloss paint. Fireplace surround in green precast Terrazzo with Genoa marble chippings. House No. 2. As House No. 1, except internal face of front door, surrounding flush panel, and Nursery door, pillar box red gloss paint. Front of hall cupboards, dark green gloss paint. Bookcase, softwood verticals at 2 ft. centres painted white, 4 plate glass shelves sliding into aluminium channel bearers.

### EXTERNAL FINISHES

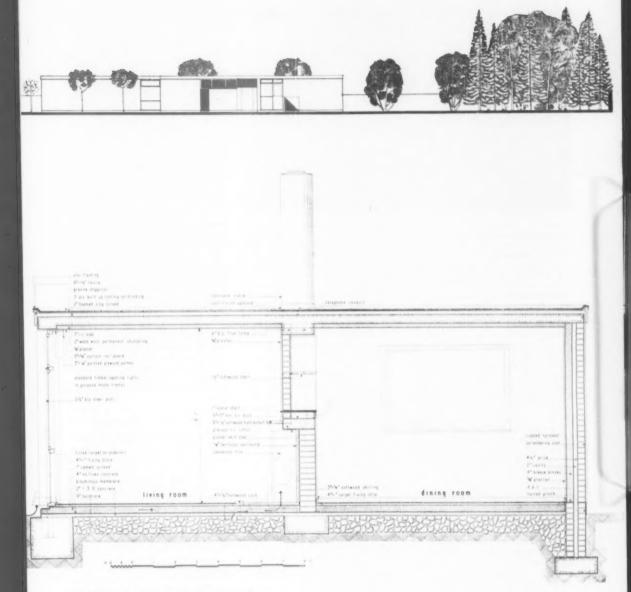
House No. 1. West face of bedroom wing, deep pink "Tyrolean" spatterdash (unrubbed) applied to 1:6 sand-cement rendering. All other walls, white "Tyrolean" (rubbed down with carborundum stone 24 hours after application). 6 in. tarred plinth all round. Woodwork generally white gloss paint with relieving colours in canary yellow, dark grey, light grey and black.

House No. 2. East walls to Nursery and Dressing Room, dark red "Tyrolean" (unrubbed). All other walls, white "Tyrolean" rubbed down. 6 in. tarred plinth all round. Woodwork generally white. Other colours: dark grey, black, medium grey and light blue.

GENERAL CONTRACTORS: C. W. L. PILE LTD.

SUB-CONTRACTORS. Built-Up Roofs: Wm. Briggs & Sons Ltd. Electrical Installation: Chitty Bros. External Finish: Cement Marketing Co. Ltd. Fireplace (House No. 1): B. Finch & Co. Ltd. Ligh Fittings: The General Electric Co. Ltd.; Hume Atkins & Co. Ltd.; Troughton & Young (Lighting) Ltd. Lights to Roof: Lenscrete Ltd. Patent Glazing: Williams & Williams Ltd. Reinforcement for Roof Slab: British Reinforced Concrete Engineering Co. Ltd. Sanitary Fittings: J. H. Sankey & Son Ltd. Shutter for Chimney (House No. 1): Holloway Bros. (London) Ltd. Sink and Kitchen Units: Stitsons Sanitary Fittings Ltd. Tertazzo—Precast Units for fireplace surround and Overmantels: W. B. Simpson & Sons Ltd. Windows, Doars, Cupboard Fronts and Dresser Units: Bailey & Whites Ltd. Window and Doar Furniture: Yannedis Ltd.

Architects: Powell & Moya, AA.R.I.B.A.



SECTION THROUGH HOUSE NO. I.

Two Houses in Chichester

# REVIEW OF THE AMERICAN PRODUCTIVITY REPORT ON BUILDING

By L. W. ELLIOTT, A.R.I.B.A., A.M.I.C.E., A.M.I.Struct.E., (Alfred Bossom Research Fellow, 1950.)

N this review more emphasis has been placed on the rôle of the architect and his influence on building economy in America as distinct from the increased productivity of the operative and the more efficient organisation of the contractor. It is however interesting to note that although wage rates are approximately four times those in Britain. and individual productivity is 50 per cent. greater, in most trades a 40hour week is worked as against 44 hours. Therefore the overall increased labour productivity is reduced to 45 per cent. As the ultimate cost of the building is only 50 to 80 per cent. greater and in this country the proportion of work accountable to labour is one-third, the labour costs of a job in America would be one-half to two-thirds of the total cost. As the material costs in America are only slightly higher than here, then it is clear that the minimum use of labour is achieved by constructional design and organisation on the part of the builder and architect. In comparing the cost of building in both countries the team state that a building as designed in this country would probably cost more in America than the equivalent American building because of the use of lighter forms of construction, less rigid regulations regarding safety, welfare and bylaws.

The volume of new work in America, taking the last complete year of 1948, was 4,694 millions sterling with a labour force of 2,060,000, whereas for the same year in Britain a labour force of 1,498,000 produced 1,181 millions' worth of work. The volume of work per operative was £2,280 as against £800 in this country, or nearly three times as much, although, assuming that an American building ultimately costs 50 per cent. more, the productivity of the operative in terms of actual building is at least twice as much in America.

This difference can only be accounted for by the architect's responsibility for design and organisation.

# The Architect's Contribution to Productivity

The team rightly stress the American architect's responsibility for speedy and efficient building. His

productivity also appears to be higher, as there are 22,000 registered architects in America and in 1948 the volume of work was 4,694 millions, or £210,000 per architect, whereas 16,000 architects existed for 1,181 millions or £74,000 per architect. Naturally, these figures can only indicate the size of the profession in relation to volume of work.

One must also take into account the greater amount of actual work for which the American architect is responsible as no quantity surveyors are employed and the architect's drawings and specifications have to be complete in every detail before bidding, which is more than one can say for work in this country. He has also to be a keen business executive responsible for the financial as well as the design success of the work, although the two functions are much more closely connected than we care to admit in this country.

With the development of modern techniques, especially in the field of structural and mechanical engineering, more use has to be made of consultants and it is important to note that approximately one-tenth of the architects' offices include, as members of the firm, professional engineers of one kind or another. The vast majority of the remainder have working arrangements with firms of structural and mechanical engineers. Arrangements of this kind can only speed the preparation of the architect's drawings and enable the engineering services and equipment to be incorporated at the design stage.

Tenders are invited on the basis of complete drawings and specifications and contractors make up their prices from actual drawings instead of pricing a bill, thereby giving a contractor more scope for bidding on the basis of organising the construction in such a way as to make for economy in operation. The team rightly urged that even if a bill is provided, complete drawings should be issued for tenders so that the builder may take into account the use of plant and erection procedure.

In view of the completeness of information to constructors and to the speed of operations, it is not surprising that variations after commencement are extremely rare.

The work is supervised, as in this country, by a clerk of works, but the team found them of a much higher

standard of intellect and many were, in fact, registered architects in the same way that a resident engineer on civil engineering contracts in Britain is usually qualified.

There is obviously much that can be learnt from the American architect. He appears to be more alive to the actual job of building and his responsibilities are more onerous. His control of the job is complete and nothing is left to the contractor's discretion as far as the execution is concerned. It is natural, therefore, that the architect tends to design for speedy and efficient building

The team could have devoted more attention to the important factor of the architect being aware of economies to be derived from planning and construction. Such points as standardisation of details, ready use of new forms of construction, the segregation of trade operations to avoid one trade waiting on another or making good after late installation of services, the avoidance of differing materials for the same function, and the design of the work to use plant where economic to do so, are extremely important, as any attempt at efficient contractural organisation will be thwarted if the architect has not designed economi-

### Construction Techniques

Prefabrication. Although many prefabricated systems have been evolved, their use appears to be declining in favour of a range of factory-made components to speed erection. There has also been an extensive simplification of components and a greater use of modular co-ordination on an industry-wide basis. The team did not mention the increasing use of site subassembly methods which are being used especially on housing sites with repetitive units. It is apparent from the American technical press that builders are using, for example, precut timber which is assembled into wall framing and roof trusses before erection. There also seems to be an increase in the use of dry wall-construction and the avoidance of plaster to speed erection and drying out. It is by using these methods that the American builder can effectively use power tools. The

team did, however, mention the more widespread awareness of the building industry of factory methods of production, than in this country.

Although the team mentioned that steel and concrete construction is general for most types of buildings except houses, timber is used as a framing material for a great deal of housing.

The team noted that welded structures were uncommon, and this may be due to the time and cost factors and to the fact that a more extensive range of steel sections is available to achieve greater economy with riveted work.

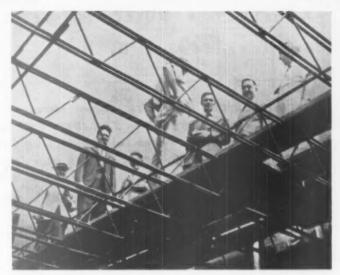
Reinforced concrete was reported as being frequently used in preference to steel for repetitive work up to fourteen storeys high, especially as timber is plentiful and shuttering simplified by devices such as steel ties left in position in the concrete members.

Prestressed concrete did not appear to be used as much as in Europe, and this is probably due to the cost of this method without the necessity to save steel.

The quality of concrete is more universally specified by performance standards rather than by mix. is a good method, as it gives an incentive to the contractor to produce higher strength mixes with the minimum use of cement, and the team recommend that this method be made more general in this country. The practice of entraining minute bubbles of gas in the concrete to improve workability and resistance to weathering is also more prevalent in America, and concrete technique could be improved by adopting this method.

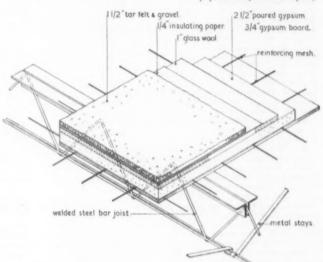
More use is being made of light forms of roof and floor construction for lightly loaded structures. A common system is to use welded built-up lattice joists in conjunction with metal decking, reinforced gypsum plaster or precast concrete units. On one job sheet steel box section joists were used strong enough to support the dead load of the floor but which were later filled with concrete to attain the full strength.

The delay and expense of plastering has led to the more frequent use of dry methods of construction using light framing and building boards, standard manufactured partition units or high quality building blocks with finished surfaces not requiring plaster. Metal lath and trim is often used to increase strength and save weight as a basis for plastered partitions. Where plaster is used productivity is increased by the ex-



Members of the Productivity Team examining lattice ceiling joists.

(reproduced from the Report)



Detail of gypsum roof. Senior High School, near Chicago. (reproduced from the Report)

tensive use of metal trim such as corner beads and skirtings.

The team were impressed with the efficiency and simplicity of plumbing due to preplanning and its incorporation in the structure, enabling sub-assembly methods to be used. Sanitary fittings and service are built into the job at an early stage and protected if necessary against subsequent damage.

For drainage, the general use of a combined system with consequent

simplification is a direct economy. It is interesting to note that drains are not flaunched or bedded in concrete, and although this might be satisfactory in most types of soils, it could be a doubtful economy if practised on a general scale.

Water supply is usually direct from the main and the elimination of tanks and pipes in roofs would effect a big saving with immunity from frost.

The efficiency of American heat-

(Continued on page 579)

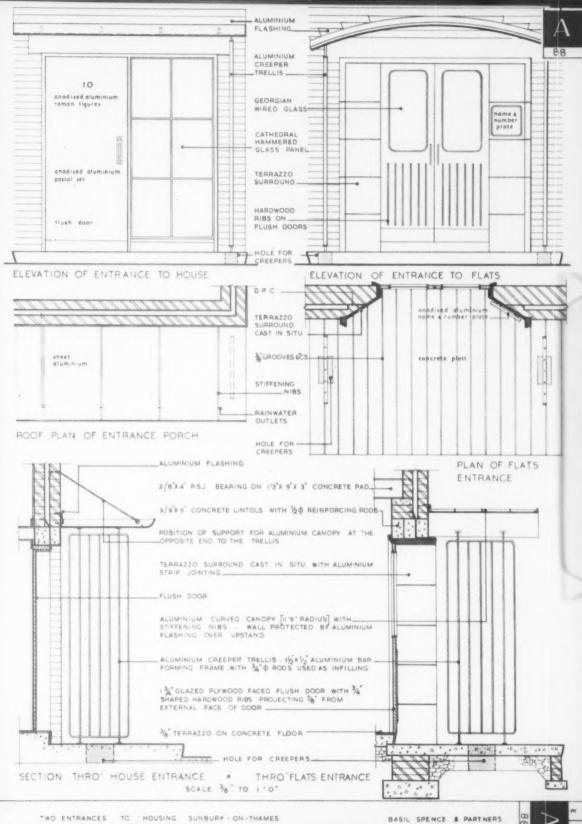
# ARCHITECT & BUILDING NEWS DETAIL SHEETS

Edited by Edward D. Mills, F.R.I.B.A., F.R.S.A.

Reprints of the first fifty detail sheets which appeared in the A. & B.N. from 25.6.1948 to 17.6.1949, will be ready shortly. Now is the time to order from the Publishing Department, Architect & Building News, Dorset House, Stamford Street, S.E.I. Price for the set of fifty with index: 7/6, or 12/6 in folder.

The list of subjects and names of the architects is given below.

Sheets I — 50						Author	Numbe
Aluminium Flagmast, Coventry	***	***	***	***		D. E. E. Gibson	A.I. C.17
Balcony, Monks Park Flats, Coventry	***					0 5 5 611	A.2. E.6.
Porch, Little Baddow, Essex	***	***				n - # M L	A.3. E.5.
Bedroom Fittings, Little Baddow	***	844	***			D - 61 M L	A.4. E.13.
Lampstandard, Broadgate, Coventry	***	***				D F F CIL	A.5. C.17
Bar Counter, Youth Centre, Redhill	***					Edward D. Mills	A.6. F.13.
Service Bar, Tea Centre		***			***	Mile Dies	A.7. K.13
Flower Boxes, The Tea Centre			4.77			MILE DI L	A.8. K.13
			***			0	A.9. E.8.
Porch, B.I.S.F. House, Type B						*	A.10.E.5.
						Frederick Gibberd	A.11.E.5.
Porch, B.I.S.F. House, Type A.I						Donovan H. Lee (Engineer)	A.12.E.5.
Wall Detail, Factory Building, Dagenham						Edward D. Mills	A.13.A.2.
Exhibition Information Desk	***	***	***	+++	***	Misha Black	A.14.K.13
Bedroom Window, House in Highgate	ini	***	***			Tayler & Green	A.15.E.6.
	***	2.4				Tayler & Green	A.16.E.13.
		244	***			Tayler & Green	A.17.E.6.
Reception Desk, Methuen's, Essex Street	224	***	***		***	Bronek Katz & R. Vaughan	A.18.D.13
	414	313		***	***	Taylor & Green	A.19.E.5.
Entrance B.I.F. 1948	111		***	***		Maxwell Fry & Jane Drew	A.20.K.5.
C.O.I. Crisis, Charing Cross Exhibition		***	***	775		Misha Black	A.21.K.17
Porch, Sandringham Road Housing Scheme						Norman & Dawbarn	A.22.E.5.
Balcony, Sandringham Road Housing Schen	ne, H	ackney				Norman & Dawbarn	A 23.E.6.
Garden Shelter, Sandringham Road Housin	g Sch	neme				Norman & Dawbarn	A.24.F.17.
Windows, Residences, Lagos, Nigeria	***	404				Edward D. Mills	A.25,E.6.
Porch, Flats at Whitton, Middsx	***	200					A.26.E.5.
Window, Flats at Whitton, Middsx.	851					Eric Lyons & G. Paulson Townsend	A.27.E.6.
Furniture Details, Westminster Library	400	50.0	***			Riches & Blythin	A.28.C.13
Counter Details, Danish Travel Bureau, Lo	ondon		202			Korbing, Hvidt & Nielsen	A.29.B.13
Panel, Danish Travel Bureau, London		***	***			Markley 11 (1) 0 MUL	A.30.B.13
Kitchen, House in Highbury Park	***	***	***			F. I. F. SALL	A.31.E.17.
Fireplace, House in Highbury Park	400	482				EA I D MILL	A.32.E.8.
Shopfront, St. Mary's Street, Weymouth				***		C 144	A.33.B.6.
Lighting Improvement, Tea Tasting Room,	Calc	utta				C 1 D1	A.34.A 6.
Window, House at Birdham, Sussex			244			D 1 0 14	A.35,E.6.
	4.07		***			6	A.36.E.7.
Petroleum Information Bureau Stand, Royal				York			A.37.K.17
Wall Detail, School in Georgetown, Britis						1 0 0 11	A.38, D.2.
Reception Desk, British Rayon Industry D						F M UF AL B	A.39.K.13.
Two Display Panels, British Rayon Industry						F M U F A L F	A.40.K.13.
Staircase Detail, 5, Bentinck Street, Londo							A.41 D.7.
Counter Details, Shop in Newman Street,						Decide C	A.42.B.13.
Record Racking, Shop in Newman Street,						Descript C	A.43.B.13.
Memorial Seat, Weybridge, Surrey		10.0				D 1 VA/	A.44.F.13.
Wall Detail, House in Beaconsfield						Luce Deal.	A.45.E.2.
Staircase, House in Southwood Lane, High	gate				***	Market Programme Communication	A.46.E.7.
Staircase, Residences, Lagos, Nigeria	0		***	***		Ed. and D. Mills	4 47 5 7
Fireplace, Penthouse Flat, Ladbroke Grove					***	Management of SAC-11	1 10 5 0
Staircase, Showroom in Bromley, Kent						D	1 10 15 7
			***			man and the same and the same and	A.49.K.7.

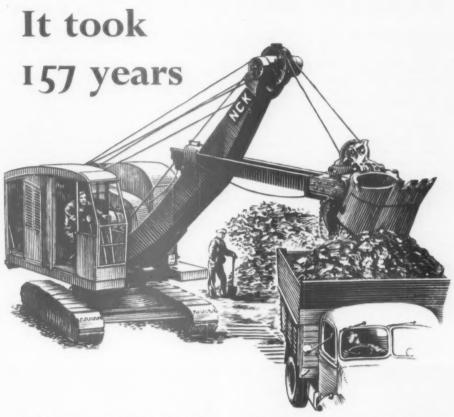






TWO ENTRANCES TO HOUSING, SUNBURY - ON - THAMES

ARCHITECTS: BASIL SPENCE & PARTNERS



The 2,000 moving parts in 20 different steels that are built into an N.C.K. excavator are manufactured and assembled by Newton Chambers in a few weeks, and machines are rapidly leaving the production lines for home and export markets. But the ability

of Newton Chambers to achieve this, and the qualities inherent in everything they make, have resulted from seven generations of experience. They spring from a Yorkshire pride of workmanship and a tradition founded at Thorncliffe 157 years ago.

# **Newton Chambers**

& COMPANY LIMITED OF THORNCLIFFE, SHEFFIELD

IRONFOUNDERS - ENGINEERS - CHEMICAL MANUFACTURERS

ing and ventilation systems is well known and their more general use has led to the production of efficient types from the cost and fuel point of view. Much more attention appears to be given to structural insulation than is usual in this country in spite of our shortages of fuel.

Electrical installations are also preplanned with greater efficiency and extensive use is made of flexible

conduit.

### The Influence of Mechanical Services on Planning

In America, the building owner is extremely conscious of the comfort to be derived from efficient heating and air-conditioning equipment and their use is being taken into account

in planning.

In the case of the small house the team stress the economy in plan to be derived from the use of an inexpensive simple form of central heating where all parts of the house are equally warm. Such items as the avoidance of corridors and entrance lobbies, open staircases direct from a room, the absence of flues, make for low building costs.

Offices and public buildings are

more compactly planned by the increased use of mechanical ventilation and properly designed artificial lighting, and main staircases are often omitted when elevators are installed with only escape staircases of utilitarian construction.

Classrooms in schools where airconditioning is employed are double banked and of two to four storeys in height, thereby reducing corridor space and external walling. The extracted air is sometimes passed through clothes lockers in a central corridor as a means of drying.

### Conclusions and Recommendations

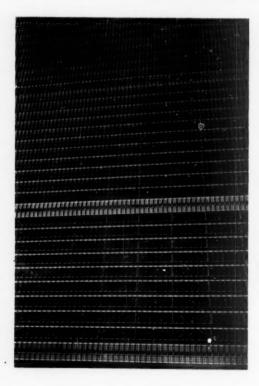
The team concluded that the great speed and comparable low cost of jobs was due to complete preplanning, proper co-ordination and collaboration, and that this, to a certain extent, was possible by the adequate supply of materials, labour and mechanical aids. They considered that, above all, the enthusiasm and output of all concerned was the most vital factor and suggest that this spirit must be introduced in this country to achieve an increase in production.

As far as the architect is concerned they set forth the following guiding principles:

The improvement of relations with the client to preplan without the need for variations, the preparation of designs to ease construction and avoid unnecessary waste and the completion of all working drawings, specifications and schedules for issue to the tenderers. The contractor should be urged not to commence building operations until the organisation of the job has been worked out to an advanced stage, and that the organisation should take account of sub-contractors, time and progress schedules and the right use of plant.

In the supply of materials the team rightly urge that adequate supplies of timber must be made available to secure economy and more study should be made of the American building materials industry.

It cannot be over-emphasised that the architect is in the key position to stimulate increased productivity by design and the planning of the construction, and they should study this very refreshing report very carefully to enable them to put their own house in order.





Above: Model of the projected 21-storey building for the Lever Brothers Company in glass and stainless steel to be erected on the West side of Park Avenue. Architects: Skidmore, Owings and Merrill

Left: Uno Headquarters Building, Manhattan. (Photo: Yvonne McHarg)

### Travel Hints for Students

THE first question the student thinking of going abroad this summer will probably ask is: "How little money can I manage on?" This depends, naturally, on personal tastes and habits, and, to some extent, on the country visited. Italy, for instance, is notoriously cheaper than Belgium. But a fairly safe estimate is about £4 a week, plus fares to and from some suitable starting place. If you are really careful you may be able to make

do on rather less.

Fares are the biggest headache. However, a third-class rail and boat return is not, as many people imagine, an irreducible minimum. Members of the Youth Hostels Association, for instance, can get 14-day returns to a number of places (Holland, Austria, etc.) at lower rates, and can cut the cheapest ordinary fare to Denmark by nearly half. Full details of these facilities are given in the International Youth Hostel Handbook, price 2s. 2d. including postage from the Y.H.A. Sales Office, 38 Great Ormond Street, W.C.1. This incidentally is a mine of useful travel information as well as a guide to youth hostels all over the world.

It is also worth keeping an eye on the tours organised by the National Union of Students, International Student Service (addresses below), and other student organisations. They often provide extremely cheap ways of

getting about.

If you want to go further afield than Paris or Brussels, hitch-hiking from the Channel port is your cheapest method. This is not as daring as it sounds, provided you observe a few simple rules. On no account desert the main national and international routes. Until you have some experience of choosing village pubs and small hotels for your night's lodging, plan each "hitch" to land you at or near a youth hostel. (Membership of the Y.H.A., valid all over the world, costs you 10s. a year if you are over 21, 5s, if you are under). As the "thumb" signal is not universally understood, make the same sort of sign at drivers as when stopping a bus. Do not expect anyone to stop for you after dark, and do not be surprised if a driver is chary about taking you across a frontier with him. Should you turn out to be smuggling anything he is liable to get into serious trouble.

Perhaps the most useful aid to hitchhiking abroad is a small Union Jack sewn on your rucksack or your lapel. This may sound decidedly un-British. But on the Continent it is considered normal courtesy for the foreigner to make his nationality plain. There are, too, a lot of people on the other side of the Channel who remember only too well the days when they would have given a great deal more than a mere lift in a car for the sight of a

Union Jack, and consequently are only too pleased to help anyone who is obviously British.

Remember, however, that hitchhiking is definitely discouraged by the occupation authorities in Germany

and Austria.

Now for accommodation. Vouth hostels are the obvious first choice. bed costs, on average, 1s. 6d. a night. Where meals are provided they are correspondingly cheap, and hostels usually provide facilities for cooking your own food. But they have their limitations. The popular regions are nearly always overcrowded, so that you have to book well in advance. In most places your stay is limited to three consecutive nights, and in the big towns it is certainly advisable to look for some alternative.

One possibility is the Y.M.C.A. and Y.W.C.A. hostels, the addresses of which can be obtained from the International Secretaries of the two bodies, Both have their British headquarters in Central Buildings, Great Russell Street, London, W.C.1. Women are likely to find a Y.W.C.A. hostel in Brussels (in the Rue Jourdan, near the Porte Louise) particularly useful. caters specially for students and has plenty of room for visitors during vacations.

The most useful institutions, however, are the ordinary student hostels that exist in almost every Continental university town and which usually welcome foreign visitors, particularly during the summer. They are mostly

extraordinarily cheap.

An excellent hostel is the Maison Hollandaise, Boulevard Jourdan 61, Paris XIVe (Metro; Port d'Orleans). Here a bed in a dormitory for twelve costs about 1s. 6d. a night, slightly more for double or single rooms, There is no need to book in advance. You can save money by doing your own cooking in the well-fitted kitchens. Rules and restrictions have been reduced to a minimum. The front door is even left open till 2 a.m. each morning! A full three-course lunch or dinner can be obtained in a students' canteen round the corner for fr.60 (about 1s. 3d.). Thanks to the Maison Hollandaise, you can have a thoroughly good week in Paris for about

Similar facilities at similar prices are provided in the other national hostels of Paris's Cite Universitaire, though none is quite as lavish as the Maison Hollandaise. All over the rest of Europe, too, you will find student hostels which provide accommodation at minimum rates. It would be impossible to list them here, and in any case up-to-date information is usually advisable. (The main hostel in Rome, for instance, has decided to close during Holy Year).

The best way to get details of these hostels is to write to the Travel Depart-ment of the National Union of Students, 3 Endsleigh Street, London, W.C.1. They will give you the ad-dresses of secretaries of affiliated bodies in any countries you want to visit, who will in turn tell you fully about hostels and other facilities open to foreign students. In some cases the International Student Service, 55 Gloucester Place, London, W.1, may be able to give more help, but the N.U.S. Travel Department will know more about that than you do, and you are advised to apply to them first. If the student body of your school or university is not affiliated to the N.U.S. you should, when you apply, send 7s. 6d, for individual membership, though this, I gather, is not insisted upon.

The N.U.S. can also supply an International Student Identity Card, which will cost you 5s, and save you pounds. In many Continental countries students are entitled to all sorts of reductions on museum entrance fees and sometimes even train and tram fares. But they have to prove their bonafides. For the British student who has no signed and sealed document issued to him by his school or college as is normal on the Continent, almost the only way of doing this is to arm himself with an International Identity

Production of this card will almost invariably gain admittance to any student union or canteen. In Copenhagen, for instance, the cheapest and one of the best places to eat is the Student Union, a magnificent building in the Raadhusplads. All the foreigner is required to do there is to show his student pass to the porter as he goes in, and this is roughly true of every similar establishment throughout Europe. Whatever the precise local rules may be, it is most unlikely that you will be refused admittance-provided you can prove you are a student. And in addition to the cheap food and the usual club facilities - reading rooms and the like - you are certain to find there fellow-students ready to give friendly help and advice. If you plan your trip to spend most of the time in university towns, £4 a week should be ample.

There is one final service which is of particular interest to architectural students. If you are setting out with the intention of visiting any particular items of architectural or planning interest, the International Federation of Housing and Town Planning (write to the Organising Secretary, Singel 453, Amsterdam) will be delighted to put you in touch with people who can help you, or assist you in solving any problem which might arise.

H. DENNIS JONES.

### TORONTO

### International Trade Fair

THE Canadian International Trade Fair opened on May 29 until June News reaches us that the Fair will be 40 per cent. larger than in 1949, owing to increased international participation. Overseas exhibitors account for 70 per cent. of the available space. English and Scottish exhibitors rank high in the list of countries who have taken space.

We are informed that Canada has yielded to the United Kingdom. petition from America is, of course, severe and several British firms are making a determined effort to increase their dollar trade, which in 1948 accounted for 11.4 per cent. of Canada's total imports as against 58.5 from the U.S. British tool, machine tool and scientific instrument manufacturers have taken 35,000 square feet for the largest display of its kind ever shown in Canada, Here nearly 100 British manufacturers will show amongst other exhibits 250 machine tools.

Delays in delivery are being overcome by giving priority to dollar markets even at the expense of supplying home markets

In the above-mentioned group of manufacturers George Kent Ltd., are showing a number of exhibits of engineering interest, including a water meter first produced in 1922. In the same group are Hilger & Watts

Ltd., who raise once again, in a letter to us, the controversial issue of stand design. The firm's stand has been designed sign. The firm's stand has been designed by a committee. The accent is on the exhibits not on the surroundings, "a point." to quote this firm's comment. "which in our experience is lost sight of by architects, who, quite naturally, are more interested in the general appearance of the stand than in the details of the exhibits." An interesting point of view, and one which is widely held.

In the building materials, heating and plumbing section Messrs. W. H. Colt (London) Ltd., are showing industrial and domestic ventilators as well as their "Coltero" plastic lathing.

Wood working machinery and toolsboth hand and power operated, are being shown by Interwood Ltd.

Engineers' small tools are part of the Engineers' small tools are part of the extensive exhibit of the English Steel Corporation. Competition to the U.S. is offered by the Lightfoot Refrigeration Co.. Ltd., who are showing small condenser units and hope to get inquiries for their larger plant and in connection with air condition installation, etc.

Fans and ventilation appliances will comprise the exhibit of Keith Blackman Ltd.

Ltd.

A tilting saw is one of many items of woodworking machinery to be shown by J. Sagar & Co. Ltd.

The Engineering Industries Association, founded in 1941, embraces a num-ber of firms who manufacture equipment used in building. Exhibits in the group include paint spraying equipment by Acraspray Manufacturing Co. Ltd., wall Acraspray Manufacturing Co. Ltd., wall tiers; nails, etc., by Cordes (Dos Works) Ltd., safety electric heaters for buildings by Delaney Gallery Ltd., performed plumbing units by Econa Modern Products Ltd., builders' tools by the Macco Manufacturing Co. Ltd., aga appliances by William Sugg & Co. Ltd., and non-ferrous tubes by the Yorkshire Copper Works Ltd. Works Ltd.

Drawing instruments and drafting machines will be shown by W. F. Stanley and Maritta Drafting Machines Ltd. British Building Plant will be repre-

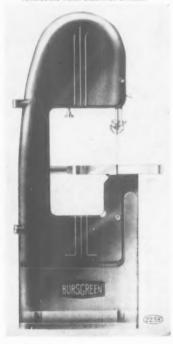
sented in the exhibits of Aveling Barford Ltd., and the Chaseside Engineering Company Ltd.



Water meter first produced by George Kent Ltd., in 1922.



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Above: The Aveling-Barford Heavy Duty Diesel Shuttle dumper with reversible driving seat. Right: The Sagar Bandsaw with horizontal table and tilting head.

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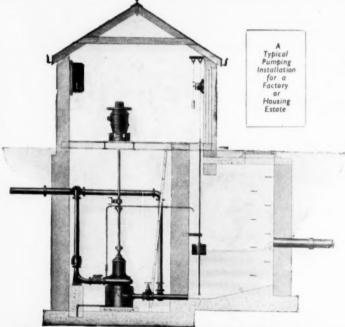
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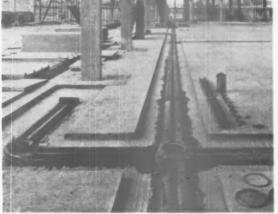
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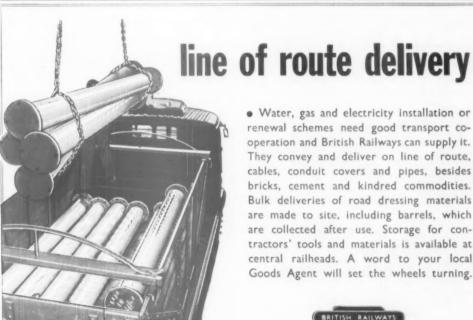
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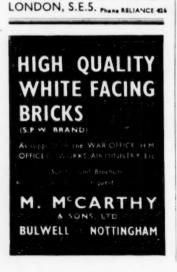
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Particulars of the posts and forms of application may be obtained from the undersigned
(stamped addressed footscap envelope) and should returned by not later than 14 days after the searance of this advertisement.

4. BOYES WATSON, Chief Education Officer.

ducation Office. Warrior Square, Southend-on-Sea. 14553

#### CITY OF BIRMINGHAM PUBLIC WORKS DEPARTMENT.

A PPLICATIONS are invited for the following ap-A pointments in the Architectural Section of the Public Works Department —

(a) ARCHITECTURAL ASSISTANTS

(b) ARCHITECTURAL DRAUGHTSMEN.

Candidates for post (a) should have passed the Intermediate Examination of the Royal Institute of British Architects and have had at least one year's experience in an Architectural Office
Candidates for post (b) should hold the Higher
National Certificate in Building.

The commencing salary will be £480 per annum, rising by annual increments to £525 per annum, in accordance with Grade A.P.T. IV of the National

The appointment will be subject to one month's notice on either side and to the provisions of the Local Government Superannuation Act, 1937.

The suscessful candidates will be required to

name a medical examination.

Applications, stating age, qualifications and experience, and giving the names and addresses of two persons to whom reference can be made, should reach the undersigned not later than 30th June. 1950

HERBERT I MANZONI. City Engineer and Surveyor The Civic Centre, Birmingham, 1 14

### HUNTINGDON COUNTY COUNCIL.

### COUNTY ARCHITECT'S DEPARTMENT

APPLICATIONS are invited for the following

A P.T. Salary £480 x £15 to £325 per annum.

(b) ARCHITECTURAL ASSISTANT - Grade II.

A.P.T. Salary £420 x £15 to £465.

Previous experience in local government service not essential.

The appointments will be subject to the provi of the Local Government Superannuation Act.

Applications should be submitted to S. J. Han-A.R.I.B.A., County Architect, County Buildings, Huntingdon, by not later than Monday, 12th June, 1950, with two recent testimonials or the names f two persons to whom reference may be made JOHN KELLY, Clerk of the County Council County Buildings, Huntingdon, 1st June, 1950.

A IR MINISTRY have vacancies for DESIGNERS A IR MINISTRY have vacances for DESIGNERS).

DRAUGHTSMEN in the Designs Branch of
the Works Department for high class work in the
following fields Architecture, Drainage and Water
Supply, Land Survey. The work includes design
for London Airport. Salaries are on ranges up to
25%. Starting pay according to age and qualifica-1.50. Starting pay according to the are any quantum tions. Applications starting are qualifications, pre-vious appointments and salary required, should be sent to Air Ministry S.2.th, Cornwall House, Lon-don, S.E.I. It is regretted that applications of candidates not called for interview cannot be

### CARDIGANSHIRE COUNTY COUNCIL.

APPOINTMENT OF PRINCIPAL ASSISTANT ARCHITECT

A PPLICATIONS are invited for the above per manent position in the County Architect Department, Aberayron, on A.P.T. Grade V

Candidates should be Members of the Royal Institute of British Architects, with considerable es-perience in the design and construction of modern buildings, the supervision of large contracts, and other works carried out by Local Authorities.

The appointment will be subject to the provision of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination.

pass a medical examination. Applications, stating age, qualifications, details of experience, present and previous appointments, present salary, together with two recent testimonials and names of two referees, are to be delivered to the undersigned, within two seeks of the publication of this advertisement.

ERIC CARSON.

Clerk of the Cardiganshire County Council.

Cambrian Chambers. Aberystwyth.

23rd May, 1950. [4555]

#### GOVERNMENT OF NORTHERN IRELAND.

### MINISTRY OF FINANCE. CHIEF ARCHITECT'S BRANCH ARCHITECTURAL ASSISTANTS.

A PPLICATIONS are invited for posts of ARCHI-TECTURAL ASSISTANT in the Ministry of Finance. Appointments will be non-pensionable but successful candidates will be eligible for consideration for appearament to pensionable posts as vacancies arise. Rates of pay will be fixed in accordance with the experience and qualification of the successful candidates and will be within the frange £400-£540. Qualifications: Candidates must have passed the Intermediate Examination of The Royal Institute of British Architects and have had at least two years' experience in an Architect's Drawing Office. Preference will be given to candidates who have

of British assumed in an Architect's Drawing Office, years' experience in an Architect's Drawing Office, Preference will be given to candidates who have served with H.M. Forces in war-time, provided the Ministry is satisfied that such candidates can, or within a reasonable time will be able to, discharge during efficiently.

Applications, giving date of birth, full details of training and qualifications, should be sent immedi-ately to the Director of Establishments. Ministry of Finance, Stormont. [4558]

### MINISTRY OF WORKS

THERE are vacancies in the Chief Architect's Division for ARCHITECTURAL ASSISTANTS Division for ARCHITECTURAL ASSISTANTS with recognized training and fair experience. Successful candidates will be employed in London and elsewhere on a wide variety of public buildings, including Adomic Energy and other Research Establishments. Telephone Exchanges, and

Salary: Architectural Assistants, £300-£525 per annum; plus overtime. Starting pay will be assessed according to age, qualifications and experience. These rates are for London; a small deducis made in the Provinces.

Although these are not established posts, some them have long term possibilities and competions are held periodically to fill established

Apply in writing, stating age, nationality, full details of experience, and locality preferred, to Chief Architect, W.G. 10/AT, Ministry of Works, Abell House, London, S.W.I. [445]

### UNIVERSITY OF HONG KONG.

A PPLICATIONS are invited for a PROFESSOR-A PPLICATIONS are invited for a PROFESSOR.

SHIP IN ARCHITECTURE Emoluments shown are for married members of the staff normally resident outside Hong Kong or China, and are inclusive of allowances. £2,127 = £50 - £2,377.

Applicants should possess a degree in Architecture

Applicants should possess a degree in Architecture of a British University and the Feliosoship of the Royal Institute of British Architects. Candidates should have academic and practical experience, and be prepared to take up duties by September, 1991. First class sea passages, and quarters at reasonable rentals are provided for espatialies staff.

Further particulars and information as to method of application are obtainable from The Secretary
Association of Universities of the British Com
monwealth, 5 Gordon Square, London, W.C.I. date for the receipt of applications is June

### URBAN DISTRICT OF EAST BARNET.

ENGINEER AND SURVEYOR'S DEPARTMENT.

A PPLICATIONS are invited for the following

(a) ASSISTANT ARCHITECT. A.P.T. Grade V £520-£570 plus the appropriate

(b) ARCHITECTURAL ASSISTANT. A.P.: Grade III. £450-£495 plus the appropria APT Grade III. £450-£# London Weighting

Consoleration will be given to the provision of housing accommodation if required. Applicants should be qualified by examination, and preference will be given to those having previous experience with Local Authorities. Each appointment will be subject to one month's

Each appointment will be subject to one month's notice on either side, and to the provision of the Local Government Superannuation Act, 1937. Successful candidates will be required to pass a medi-

cessful candidates was excal examination.

Forms of application should be obtained from
the undersigned and returned by not later than
Monday, 12th June, 1990.

C. M. BARNES, O.B.E., M.I. Mun.E., F.R.S. I.
Engineer and Surveyor.

New Barnet, Hertfordshire, 14547

### MINISTRY OF WORKS.

VACANCIES exist for SENIOR and LEADING VACANCIES cash for SENIOR and LEADING ARCHITECTURAL ASSISTANTS in London. at Risley (Warrington) and at Capenhurst (Cheshire), for drawing office duties in connection with important Research Establishments. Candidates should be of British nationality and have had a recognised architectural training and most appreciated.

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mood experience.

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Salary: Senior Architectural Assistants—London.

E625-750 per annum; Risley and Capenburst.

Salary: Leading Architectural Assistants London, £506-625 per annum; Risiey and Capenhurat.

£300-625 per annui £470-595 per annum. Hostel accommoda Hostel accommodation, for men, at reasonable cost, is available at Risley, and there is a possibility of housing being available in the near future at Capenburst

Apenburst.

pily in writing, statung locality desired, age,
ing and experience, to Chief Architect.

, 10/A.N., Ministry of Works, Abell House,
t Islin Street, London, S.W.I. (1996) Apply in training

### LONDON COUNTY COUNCIL.

A PPLICATIONS are invited for unestablished positions of (i) ARCHITECT, Grade III (salaries up to £700 a year) and (ii) ARCHITEC TURAL ASSISTANTS (salaries up to £580 a year). TURAL ASSISTANTS (salaries up to £580 a year in the Housing and Valuation Department. Commencing salaries in either grade will be determined according to qualifications and experience. Engagement will be subject to the Local Government Superannuation Acts, and successful candidates will be eligible for consideration for appointment in the permanent staff on the occurrence of vacancies. Successful candidates will be required to undertake the design, layout and preparation of working drawings for housing schemes cottages and multi-storey flats) and will be employed in the Housing Architect's Division. Preference will be given to candidates holding a recognized professional qualification.

sional qualification.

sonal qualification.

Forms of application may be obtained from the Director of Housing. The County Hall, West-mineter Bridge, S.E.I. (stamped addressed envelope required, and quote ref. G.R.3). Canvassing disqualifies. (2269).

### THE TRUSSED CONCRETE STEEL CO. LTD.

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DEPARTMENT.

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All positions are progressive and pessionable, and vacancies occur in London, Birmingham, Manchester and Glasgow. Five-day week. Salary according to experience and ability. Details of training, experience, and salary expected should be sent to Truson House, 55/41 Lower Marsh, London, S.E.1 (adjacent to Waterloo Station). All replies will be treated as confidential

### WILTSHIRE COUNTY COUNCIL.

#### APPOINTMENT OF ARCHITECTURAL ASSISTANT

THE Wiltshire County Council in for the post of SENTOR ASSISTANT ARCHI-TECT in the County Architect's Department.

Applicants should be Associates of the Royal In-

of British Architects or hold equivalent

stitute of British Architects or home equivarence qualifications. Salary in accordance with Grade VII of the National Scales, viz., £635 per annum, rising by annual increments of £25 to £710 per annum. Applicants should preferably have had experience in the office of a Public Authority, be conversant with school planning as required by the Education Act. 1944, and have a sound knowledge of contemporare deems.

Act. 1944, and nave a sound anoneous of contemporary design.

The appointment is superannuable, subject to medical examination, and is terminable by one month's notice on either side.

Canvassing disqualifies.

The successful applicant will be required to pro-de a car, for which mileage allowance will be

Forms of application may be obtained from the outs of appuration may be obtained from the inty Architect. County Hall, Trowbridge, and uld be forwarded to the undersigned not later in the 26th June, 1950.

P. A. SELBORNE STRINGER.

Clerk of the County Council. County Hall, Trowbridge. 24th May, 1950.

#### ARCHITECTURAL APPOINTMENTS VACANT

A RCHITECT'S Assistant required immediately with experience of industrial buildings and capable of preparing working drawings and details.— Applicants are requested to state age, experience and salary required to The Austin Motor Co. Ltd., P.O. Box 41. Birmingham. [4548]

A RCHITECTURAL Assistant required. Wide general knowledge of work in London as advantage. High salary according to ability and exadvantage. High salary according to ability and ex-perience. Five-day week.—Apply Ley. Colbeck & Partners. 51 Bishopsgate. London, E.C.2. Telephone London Wall 1917. [4562]

RCHITECTURAL Assistant required by Gol-lins, Melvin & Partners, F/ARIBA. Cap-ate working drawings. Salary £350/£550. Office experience essential. Five-day week. Telephone Museum 0883 for appointment.

A SSISTANT interested in contemporary work required for busy small office; 5-day week; near Hampton Court (10 mins. Waterloo) Salary up too 1450, according to experience. — Write Eric Lyons & Townserd, Mill House, Bridge Road.

DERMANENT positions available for competent Assistants in established London office, Salary London effice, Salary The Architect and Building News

### SITUATIONS VACANT

A RCHITECTURAL Metal Workers require a Designer-Draughtsman of considerable merit. Top salarted position for skilled man.—Apply The Morris Singer Company, Hope House, Gr. Peter Street, Wesuninster, S.W.1.

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Apply Ley Colbeck & Partners, SI Bishopsgate,
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### CONTRACTS

COUNTY BOROUGH OF BRIGHTON.

TO BUILDERS AND CONTRACTORS

VENDERS are invited for the erection of TWO CHILDREN'S HOMES on the Hollingbury

Bills of Quantities will be available on and after Friday, 26th May, 1950.

Friday, 26th May, 1990. Builders and Contractors desiring to tender should apply to the Borough Engineer and Surveyor, Mr. D. J. Howe, M.I.C.E., M.I.Mun. E., 25-30 King's Road, Brighton and enclose a deposit of £2 2s 0d. (made payable to the Brighton Corporation), which will be refunded on receign of a bona-fide tender or notification of inability to tender, providing such is received before the latest date of tendering.

The plans may be viewed during the usual office

Sealed tenders, suitably endorsed, are to be delivered in the enclosed envelope provided to the undersigned not later than 9 a.m. on Thursday, the 15th June, 1950.

13th June, 1930.

The successful tenderer will be required to enter into a bond with an approved Guarantee Insurance Company or Bank for the due and proper completion of tille work.

The Council do not bind themselves to accept the

The Council do not transvest or any tender.

J. G. DREW. Town Clerk

Town Hall, Brighton. 19th May, 1950.

### ILKLEY URBAN DISTRICT COUNCIL.

### STREET LIGHTING BURLEY-IN-WHARFEDALE.

THE Council invite tenders for the execution of the necessary work discluding the supply of materials and equipment for the installation of MERCURY VAPOUR LIGHTING (42 lighting columns) on the Trunk Road (A.65) at Burley-in-

Specifications. Schedule and form of tender may

Specifications, Schedule and form of tender may be obtained from the Council's Surveyor and plans may be inspected during normal office hours. Tenders in plain scaled envelopes, endorsed "Street Lighting, Burley-in-Wharfedale," must be received by the undersigned not lafer than noon. Jah June, 1950.

The Council do not bind themselves to accept the lowest or any tender.

BERTRAM E TOWNEND, Clerk of the Council.

Town Hall, Elicey.

2th May 1950.

14554

24th May, 1950 14564

### COUNTY DOROUGH OF ROCHDALE.

TENDERS are invited for THE PROVISION AND FIXING OF AN AUTOMATIC AND FIXING OF AN AUTOMATIC STOKER TO THE CORNISH BOILER AT HEY-BROOK SCHOOL, ROCHDALE.

Copies of the Specification may be obtained from the Borough Surveyor. Town Hall. Rochdale: Tenders. in sealed environes, endorsed, "Tender for Automatic Stoker—Heybrook School," must be delivered to the Town Clerk, Town Hall. Rochdale, not later than 9 a.m. on Monday, 19th June, 1950. K. B. MOORE, Town Clerk, 14208.

### FOR SALE

A.L. Mouldings. Plain and Embossed. and Em-bossed Ornaments. Numerous designs. — Dareve's Moulding Mills Ltd., 60 Pownall Road. Dalaton, E.S.

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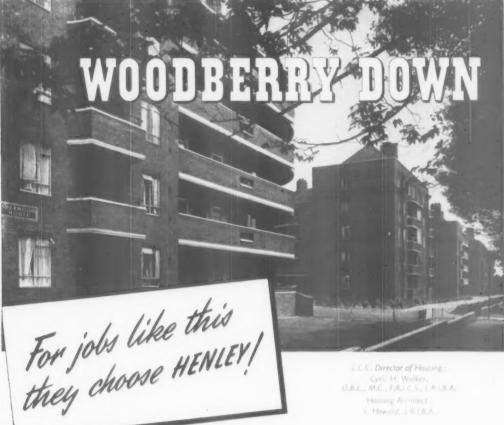








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